

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

GENERAL PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No. MO-R23E000

Owner: < name >
Address: < address >

Continuing Authority: < name, or Same as Above >
Address: < address, or Same as Above >

Facility Name: < name >
Facility Address: < physical address >

Legal Description: ¼, ¼, ¼, Sec. xx, TxxN, RxxW, < county > County
Latitude/Longitude: +xxxxxxx/-0xxxxxxx

Receiving Stream: < receiving stream > < (C, P, L1, L2, L3) >
First Classified Stream and ID: < 1st classified stream > <(C, P, etc.)> <(ID number)> 303(d) List
USGS Basin & Sub-watershed No.: < (USGS HUC12 #) >

is authorized to discharge from the facility described herein, in accordance with the limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

All Outfalls – Biodiesel Manufacturing, SIC code #2841, 2869, 2899

Stormwater runoff, secondary containment, sump, and oil and water separator discharges from biodiesel manufacturing and associated facilities

This permit authorizes only discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with RSMo §§ 621.250, 640.013, and 644.051.6; 10 CSR 20-1.020 and 20-6.020.

September 27, 2018

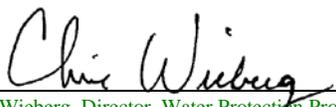
Effective Date



Edward B. Galbraith, Director, Division of Environmental Quality

September 26, 2023

Expiration Date



Chris Wieberg, Director, Water Protection Program

APPLICABILITY

1. Biodiesel manufacturing and associated facilities with materials exposed to stormwater must obtain this permit. This permit authorizes the discharge of stormwater runoff, secondary containment, sump, and oil and water separators from these facilities to waters of the state. Biodiesel is a diesel fuel substitute produced from agricultural products. This permit applies, but is not limited to, establishments with primary Standard Industrial Classification (SIC) codes, or to those facilities the Missouri Department of Natural Resources (Department) determines to be fundamentally similar to the SIC codes, listed below:

<u>SIC</u>	<u>Activity</u>
2841	Glycerin, Crude and Refined
2869	Industrial Organic Chemicals, Not Elsewhere Classified
2899	Chemicals and Chemical Preparations, Not Elsewhere Classified

2. For the purpose of this permit, the Department defines stormwater as water from rain or melting snow/ice in sufficient quantities so it runs off over land and impervious surfaces instead of seeping into the ground. This permit does not authorize the discharge of process wastewaters or by-products, unless explicitly stated.
3. For the purpose of this permit, glycerin and glycerol shall be interchangeable terms.
4. Under certain circumstances, crude glycerin or spent catalyst from the biodiesel production process, as well as spent filter media such as diatomaceous earth, can be characterized as hazardous waste and disposal of these materials is not covered under this permit. Please contact the Department's Hazardous Waste Program for assistance in determining if a hazardous waste permit is required.
5. Biodiesel production, incineration of glycerin, or its use as a fuel may be subject to regulation by the Department's Air Pollution Control Program. If you intend to construct an incinerator or intend to use glycerin as fuel, such as for a boiler, contact the Air Pollution Control Program to determine permitting requirements.
6. This permit does not apply to the underground injection of glycerin or any other waste products. Please contact Department's Missouri Geological Survey with any questions regarding underground injection.
7. This permit does not authorize the discharge of spilled materials such as glycerin/glycerol, or petroleum products drained from or spilled during the refueling of any equipment (transformers, trucks, cars, forklifts, etc.).
8. In accordance with 40 CFR 122.26(g), if a facility has no materials exposed to stormwater (all materials and activities are protected by a storm resistant shelter enclosed on all sides to prevent exposure to rain, snow, snowmelt and/or runoff), the facility may apply for No Exposure Certification in lieu of coverage for stormwater discharges under this permit. If applicable, the facility must submitted a No Exposure Certification form (<https://dnr.mo.gov/forms/780-2828-f.pdf>) with the application for permit coverage. One can find No Exposure Certification Guidance at <https://dnr.mo.gov/pubs/pub2729.htm>. Some examples of the no exposure requirements are:
 - a. Drums, barrels, tanks, and similar containers are tightly sealed, provided those containers are not deteriorated and do not leak (sealed means banded or otherwise secured and without operational taps or valves);
 - b. Adequately maintained vehicles are used in material handling; and
 - c. All industrial materials consist of final products other than products which would be mobilized by stormwater [10 CSR 20-6.200(1)(B)16].
9. If at any time, the Department determines the quality of waters of the state may be better protected by requiring the owner of any facility to apply for an individual site-specific permit, the Department may do so. [10 CSR 20-6.010(13)(C)]. Cases where a site-specific permit may be required include, but are not limited to, the following:
 - a. The discharge(s) is a significant contributor of a pollutant(s) which impairs the beneficial uses of the receiving stream;
 - b. The discharger is not in compliance with the conditions of the general permit;
 - c. A Total Maximum Daily Load (TMDL) containing requirements applicable to the discharge(s) is approved.
10. A construction permit is not required for oil and water separators built to meet permit requirements. A facility covered under this permit may use a mechanical oil/water separator without obtaining a separate permit to build oil/water separator. A permit may be required to operate the oil and water separator, and the facility should check with the Department's regional office associated with the facility's location for a determination.

11. The permittee may discharge stormwater from secondary containment or a sump directly to a sanitary sewer system, provided the receiving facility has provided permission in writing they agree to accept such water.
12. If at any time the holder of a general permit should desire to apply for an individual site-specific permit, the permittee may do so.
13. If at any time, the holder of an individual site-specific permit should desire to apply for a general permit, the permittee should contact the Department to determine applicability and procedures.
14. Certain non-stormwater discharges are authorized under this permit as follows:
 - a. Uncontaminated discharges from fire-fighting activities;
 - b. Uncontaminated condensate from air conditioners, coolers and other compressors, and from the outside storage of refrigerated gasses or liquids;
 - c. Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
 - d. Routine external building wash down not using detergents; and
 - e. Incidental windblown mist from cooling towers which collects on rooftops or adjacent portions of your facility, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).
15. This permit does not authorize the discharge of waters other than stormwater, water from sumps, secondary containment, and oil and water separators as well as the allowable discharges listed above. This permit may apply to facilities conducting the blending of biodiesel with petroleum products, but only when the total amount of petroleum stored on site for purpose of blending with biodiesel does not exceed 1,000 gallons.
16. Discharges to the watersheds of a Metropolitan No-Discharge Stream (10 CSR 20-7.031 Table F) is prohibited except uncontaminated cooling water, non-contaminated stormwater flows, permitted stormwater discharges in compliance with permit conditions, and excess wet-weather bypass discharges not interfering with beneficial uses per 10 CSR 20-7.015(5) and 7.031(7). Existing interim discharges may be allowed until interceptors are available within 2,000 feet or a distance deems feasible by the Department, or unless construction of outfalls to alternative receiving waters not listed in Table F is deemed feasibly by the Department.
17. No facility shall be located in a way to allow water to be released into sinkholes, caves, fissures, or other openings in the ground which could drain into aquifers directly or indirectly (except losing streams) per 10 CSR 20-7.015(7).
18. Discharges to losing streams from industrial sources which treat influents containing significant amounts of organic loading shall apply for a site-specific permit to comply with the limitations found in 10 CSR 20-7.015(4).
19. This general permit does not authorize discharges within 100 feet up gradient or upstream of any well or water supply structure, such as an intake, within a water designated for drinking water supply as defined in 10 CSR 20-7.031.
20. For facilities discharging directly to Outstanding State Resource Waters:
 - a. Outstanding State Resource Waters are protected against any degradation in quality as defined in 10 CSR 20-7.015(6)(B) and 7.031(3)(C).
 - b. This permit authorizes stormwater discharge facilities to operate and continue to discharge only stormwater so long as the limitations set forth in this permit are not exceeded and no degradation of water quality occurs.
 - c. Should a limit be exceeded or a facility's stormwater discharge be considered to cause degradation in the water quality, the facility must take corrective action to meet the limits or install corrective Best Management Practices (BMPs) and make tangible progress toward achieving compliance.
 - d. Failure to take corrective action to address a limit exceedance and failure to make tangible progress towards achieving compliance with limits is a permit violation. If limit exceedances or degradation in water quality continues to occur, the Department may require the facility to operate as a no-discharge facility under this permit or apply for a site-specific permit.
 - e. Detailed requirements concerning stormwater discharges are in the Stormwater Requirement section of this permit.

21. For facilities discharging within the watershed of Outstanding National Resource Water, which includes the Ozark National Riverways and the National Wild and Scenic Rivers System:
 - a. This permit authorizes no-discharge facilities [as defined in 10 CSR 20-6.015(1)(B)7.] to operate.
 - b. If a no-discharge facility desires to become authorized to discharge stormwater, the facility is directed to contact the Department to discuss applicability.
 - c. Any discharge from a no-discharge facility, including stormwater, will be considered a violation of this permit unless a catastrophic or chronic storm event [as defined in 10 CSR 20-6.015(1)(B)2.-3.] occurs. In the event of a catastrophic or chronic storm event, the no-discharge facility is authorized to release only the amount of stormwater required to prevent damage to the facility or established Best Management Practices (BMPs).
22. This general permit does not affect, remove, or replace any requirement of the Endangered Species Act; the National Historic Preservation Act; the Comprehensive Environmental Response, Compensation and Liability Act; or the Resource Conservation and Recovery Act. Determination of applicability to the above mentioned acts is the responsibility of the permittee.
23. The Department shall evaluate on a case-by-case basis for inclusion under this permit facilities located within the watershed of an impaired waterbody as designated in the most recent 305(b) Report. Permittee can find Missouri's impaired waters at <https://dnr.mo.gov/env/wpp/waterquality/index.html>. The Department may require facilities found to be discharging the listed pollutant(s) of concern for any impaired water to obtain a site-specific permit.
24. This permit does not cover land disturbance activities. The permittee must obtain a land disturbance general permit for coverage of land disturbance activities through electronic permitting (ePermitting) at <https://dnr.mo.gov/env/wpp/epermit/help.htm>.

EXEMPTIONS

Facilities discharging stormwater directly to a combined sewer system with a Department approved Long Term Control Plan [10 CSR 20-7.015(10)] or to a publicly owned treatment works which has consented to receive and has the capability to treat such a discharge are exempt from stormwater permit requirements.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Table A. SECONDARY CONTAINMENT AND STORMWATER EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS						
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
EFFLUENT PARAMETERS	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	QUARTERLY AVERAGE	MEASUREMENT FREQUENCY	Sample Type
Stormwater, Secondary Containment, Sump, and Oil and Water Separator Discharge*** (Note 1)						
Limit Set: SC						
Precipitation	inches	*		*	All Events	24 hour estimate
Flow from Secondary Containment	gallons	*		*	All Events	24 hour estimate
Biochemical Oxygen Demand (BOD ₅)	mg/L	90		60	Quarterly	grab
Chemical Oxygen Demand	mg/L	120		90	Quarterly	grab
Total Suspended Solids	mg/L	100		50	Quarterly	grab
pH**	SU	6.5 – 9.0		6.5 – 9.0	Quarterly	grab
Oil & Grease	mg/L	15		10	Quarterly	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ACCORDING TO THE SCHEDULE IN TABLE B VIA THE DEPARTMENT'S eDMR SYSTEM UNLESS WAIVED. IF WAIVED SUBMIT REPORTS TO THE LOCAL REGIONAL OFFICE. THE FIRST REPORT IS DUE <u>MONTH 28, 20XX</u> . IT IS A VIOLATION OF THIS PERMIT TO FAIL TO SAMPLE. REPORT AS NO-DISCHARGE IF A DISCHARGE DOES NOT OCCUR DURING THE REPORTING PERIOD.						
Annual Operating Report (see Stormwater Requirement Section for more details.)						
Limit Set: AR						
Report Due	n/a	n/a	n/a	n/a	All Activities in Previous Calendar Year	n/a
OPERATING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> VIA THE DEPARTMENT'S eDMR SYSTEM UNLESS WAIVED. IF WAIVED SUBMIT REPORTS TO THE LOCAL REGIONAL OFFICE. THE FIRST REPORT IS DUE <u>JANUARY 28, XXXX</u> .						

* Monitoring requirement only. Measure all precipitation and flow events and report quarterly.

** pH is measured in pH units and is not to be averaged.

*** In the case of water removed from secondary containment structures or sumps, one sample shall be collected and analyzed each time water is removed and included in the quarterly average.

Note 1 These limits apply to stormwater runoff from the facility and all accumulated water in secondary containment structures, as well as any water discharged from oil and water separators. Accumulated water and separator water may be discharged if it meets requirements in Table A and does not exhibit a visible sheen. Water exhibiting a visible sheen must not be discharged even if it meets the requirements in Table A and must be treated before being discharged.

Table B	Sampling and Reporting Schedule for Quarterly Sampling
Sample discharge at least once for the months of:	Report is due:
January, February, March (1st Quarter)	April 28
April, May, June (2nd Quarter)	July 28
July, August, September (3rd Quarter)	October 28
October, November, December (4th Quarter)	January 28

REQUIREMENTS

1. Electronic Discharge Monitoring Report (eDMR) Submission System. Per 40 CFR Part 127 National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule, reporting of effluent limits and monitoring shall be submitted by the permittee via an electronic system to ensure timely, complete, accurate, and nationally consistent set of data about the NPDES program. All general permit covered facilities under this master general permit shall comply with the Department's requirements for electronic reporting.
 - a. Discharge Monitoring Reporting Requirements.
 - 1) Registration to participate in the Department's eDMR system is required as part of the application for general permit coverage in order to constitute a complete permit application and may be accessed at dnr.mo.gov/env/wpp/edmr.htm.
 - 2) The permittee must electronically submit compliance monitoring data via the eDMR system. In regards to Standard Conditions Part I, Section B, #7, the eDMR system is currently the only Department approved reporting method for this permit.
 - b. Other actions. The following shall be submitted electronically after such a system has been made available by the Department:
 - 1) General Permit Applications/Notices of Intent to discharge (NOIs);
 - 2) Notices of Termination (NOTs);
 - 3) No Exposure Certifications (NOEs); and
 - 4) Low Erosivity Waivers and Other Waivers from Stormwater Controls (LEWs).
 - c. Electronic Submissions. To access the eDMR system, use the following link in your web browser: <https://edmr.dnr.mo.gov/edmr/E2/Shared/Pages/Main/Login.aspx>. If you experience difficulties with using the eDMR system you may contact edmr@dnr.mo.gov or call 855-789-3889 or 573-526-2082 for assistance.
 - d. Waivers from Electronic Reporting.
 - 1) The permittee must electronically submit compliance monitoring data and reports unless a waiver is granted by the Department in compliance with 40 CFR Part 127.
 - 2) The permittee may obtain a temporary or permanent electronic reporting waiver by first submitting an eDMR Waiver Request Form (Form 780-2692): <http://dnr.mo.gov/forms/780-2692-f.pdf>, by contacting the appropriate permitting office or emailing edmr@dnr.mo.gov. The Department will either approve or deny this electronic reporting waiver request within 120 calendar days of receipt.
 - 3) Only permittees with an approved waiver request may submit monitoring data and reports on paper to the Department for the period the approved electronic reporting waiver is effective.
2. The results of all samples from a discharge collected and analyzed must be submitted to the Department.
3. All fueling areas present on-site or fuels and other chemicals that are transported, stored, or used for maintenance, cleaning or repair that are not already regulated under the auspices of the Spill Prevention, Control and Countermeasure (SPCC) regulation, the Resource Conservation and Recovery Act (RCRA) and/or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) shall adhere to all applicable federal and state regulations concerning underground storage, above ground storage, and dispensers, including spill prevention, control, and countermeasures.
4. The discharge shall not contain floating solids or visible foam in other than trace amounts. Cloudy, milky, or discolored water shall not be discharged.
5. All outfalls and land application areas must be:
 - a. Clearly marked in the field. On classified waters the outfall signs must be clearly visible from land and water perspectives;
 - b. Free of weeds, brush or obstructive vegetation;
 - c. Above the normal high water mark of the waterbody to which it discharges; and
 - d. Maintained so a sample of the discharge can be obtained at a point after the final treatment process and before the discharge mixes with receiving waters.
6. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (Section 644.055, RSMo). The fees can be found at 10 CSR 20-6.011.
7. Compliance with all requirements in this permit does not supersede nor remove liability for compliance with county and other local ordinances.

8. The permittee shall at all times properly maintain and operate all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit.
9. This permit does not convey any property rights of any sort, or any exclusive privilege.
10. The permittee shall furnish to the Department, within a reasonable time, any information requested to determine whether cause exists for modifying, revoking and reissuing or terminating this permit or to determine if the permittee is in compliance with this permit. The filing of a request by the permittee for a permit modification, termination or notice of planned changes or anticipated non-compliance does not stay any permit condition
11. The permittee shall furnish to the Department upon request, copies of records required to be kept by this permit.
12. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility when:
 - a. The alteration or addition could significantly change the nature or increase the quantity of pollutants. This notification applies to pollutants subject to the effluent limitations of this permit as well as new pollutants that are different from pollutants listed in this permit; or
 - b. The alteration or addition results in a significant change disposal practices and may justify the application of permit conditions that are different from or absent in the current permit.
13. There shall be no discharge of waters with a visible sheen per general criteria in 10 CSR 20-7.031(4)(B), even if this water complies with the final numeric limits in Table A. If a visible sheen is present, the water must be treated before it is discharged.
14. Spilled materials must be cleaned up within 24 hours. If the spilled material is a hazardous waste, it shall be managed as a hazardous waste. All such spills in an amount equal to or greater than 25 gallons shall be reported within 24 hours to the Department. A record of each reportable spill shall be retained with the Stormwater Pollution Prevention Plan (SWPPP) and made available to the Department upon request. If the spill occurs outside of normal business hours, or if the permit holder cannot reach regional office staff for any reason, the permit holder is instructed to report the spill to the Department's 24 hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. Leaving a message on a Department staff member voice-mail does not satisfy this reporting requirement.

STORMWATER REQUIREMENTS

1. This permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). When applying for coverage under this permit, a SWPPP that includes an Alternative Analysis of the Best Management Practices (BMPs) must be developed, implemented, and maintained at the facility. Alternative Analysis is a structured evaluation of BMPs that are reasonable and cost effective. The analysis should include practices that are designed to be 1) non-degrading 2) less degrading, or 3) degrading water quality. The chosen BMP will be the most reasonable and cost effective while ensuring that the highest statutory and regulatory requirements are achieved and the highest quality water attainable for the facility is discharged. The analysis must demonstrate why "no-discharge" or "no exposure" are not feasible alternatives at the facility. This structured analysis of BMPs serves as the Antidegradation review, fulfilling the requirements of 10 CSR 20-7.015(9)(A)5 and 7.031(3). Failure to implement and maintain the chosen alternative, which can be revised and updated, is a permit violation. Existing facilities with established SWPPPs and BMPs need not conduct an additional alternatives analysis unless new BMPs are established to address BMP failures.
2. The permittee shall select, install, use, operate, and maintain the BMPs prescribed in the SWPPP in accordance with the concepts and methods described in the following document: *Developing Your Stormwater Pollution Prevention Plan, a Guide for Industrial Operators*, (Document number EPA 833-B-09-002) published by the United States Environmental Protection Agency (EPA) in June 2015. https://www.epa.gov/sites/production/files/2015-11/documents/swppp_guide_industrial_2015.pdf. (General information may also be found at <https://www.epa.gov/npdes/industrial-stormwater-guidance>.)
 - a. **New Facilities:** The new SWPPP for the facility must be prepared within 60 days and implemented within 180 days of permit issuance.
 - b. **Existing Facilities:** The existing SWPPP for your facility must be reviewed, revised as necessary, and implemented within 30 days of reissuance of coverage.

- c. **Expanding Facilities:** The existing SWPPP for the facility, including the Alternative Analysis, must be reviewed and revised as necessary. Once expansion occurs the revised SWPPP must be implemented within 30 days of permit modification.
3. The SWPPP must be kept on-site (either electronically or paper copy), readily available upon request, and should not be sent to the Department unless specifically requested. Throughout coverage under this permit, the facility must perform ongoing SWPPP review and revision to incorporate any site condition changes.
 4. For all facilities, the SWPPP must include the following:
 - a. An assessment of all stormwater discharges associated with the facility, facility activities, and facility materials. This assessment must include a list of potential contaminants and an annual estimate of amounts that will be used in the described activities.
 - b. A listing of BMPs and a narrative explaining how the BMPs will be implemented to control and minimize the amount of potential contaminants that enter stormwater.
 - c. A schedule for monthly site inspections and a brief written report, which includes the name of the inspector, the signature of the inspector, and the date. The inspections must include observation and analysis of BMP effectiveness, deficiencies, and corrective measures that will be taken as well as the integrity of the containment structure(s) including but not limited to above ground tanks, secondary containment, external piping, etc. Deficiencies must be corrected within seven days and must be documented in the inspection report. The facility may submit a written request to the Department justifying additional time, if necessary, to complete corrective action. The purpose of the SWPPP and the BMPs listed therein is to prevent pollution per 10 CSR 20-2.010(56) to waters of the state. A deficiency of a BMP means it was not effective in preventing pollution of waters of the state or meeting effluent limits of this permit. Corrective action means the facility took steps to eliminate the deficiency. Inspection reports must be kept on-site with the SWPPP and must be made available to the Department upon request.
 - d. A provision for designating an individual to be responsible for environmental matters.
 - e. A detailed plan of action in the case of release or spill of a hazardous substance. A record of each reportable spill shall be retained with the Stormwater Pollution Prevention Plan (SWPPP) and made available to the Department upon request. The Department may also require the submittal of a written or electronic report detailing measures taken to clean up the spill within five (5) days of the spill. Such a report must include the type of material spilled, volume, date of spill, date clean-up was completed, clean-up method, and final disposal method. This requirement is in addition to the Noncompliance Reporting requirement found in Standard Conditions Part I.
 - f. A provision for providing training to all personnel involved in material handling, material storage, and housekeeping of areas having materials exposed to stormwater. Proof of training must be made available to the Department upon request.
 - g. A provision for evaluating effluent limitations established in this permit.
 5. Permittees shall adhere to the following minimum BMPs that must be implemented at all facilities:
 - a. Provide collection facilities on-site and arrange for proper disposal of waste products, including but not limited to crude glycerin, petroleum waste products and solvents, which may be exposed to stormwater.
 - b. Provide sediment and erosion control sufficient to prevent sediment loss off of the property, pollution of waters of the state, and to comply with the conditions of this permit, Missouri Clean Water Law, and the federal Clean Water Act. This may require the construction of properly designed sediment basins or other treatment structures.
 - c. Adhere to all applicable federal and state regulations concerning fueling facilities, underground storage, aboveground storage, and dispensers, including spill prevention, control, containment and countermeasures.
 - d. Store all paints, solvents, petroleum products, petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so that these materials are not exposed to stormwater or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of stormwater with container contents. Commingled water may not be discharged under this permit. Provide spill prevention, control, and countermeasures to prevent any spill of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.
 - e. Provide good housekeeping practices on-site to keep solid waste from entering waters of the state.
 - f. Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehouse activities and thereby prevent the contamination of stormwater from these substances.
 6. When sampling flow-through BMPs, stormwater samples should be collected within the first 60 minutes of discharge occurring as a result of precipitation events exceeding 0.1 inches during a 24-hour period. Precipitation events include rainfall as well as run-off from the melting of frozen precipitation. Local weather stations and on-site gauges are two

methods for obtaining local precipitation amounts. When sampling flow-through BMPs, stormwater samples should be collected when a discharge occurs.

7. Drains on secondary containment must remain closed and sealed at all times, except when draining uncontaminated water from containment. Accumulated stormwater must meet all permit requirements before stormwater can be released or it must be disposed of in accordance with legally approved methods.
8. To prevent inadvertent release of spilled or leaked contaminants, any pump mounted in the containment structure for the purpose of discharging uncontaminated water shall not be equipped with an automatic float control or other mechanism to automate its operation. Accumulated water must be sampled and treated, if applicable, before being released.
9. Secondary containment structures shall be checked after each measurable precipitation event and the subsequent removal of any accumulated water shall occur as soon as practicable in order to retain maximum containment capacity.
10. Stormwater samples should be collected prior to leaving or at the property boundary before the discharge enters waters of the state.
11. Land application may be employed as a BMP for stormwater only discharges when necessary as long as it is detailed in the SWPPP and approved by the Department beforehand. All land application activities shall comply with requirements in 10 CSR 20-6.015. Facilities should contact the appropriate Department regional office for approval to land apply stormwater. Land application of glycerin or characteristic hazardous wastes are prohibited. Surface land application shall not occur within:
 - a. 50 feet of the land application site property line, public road, or drainage ditch;
 - b. 100 feet of a water way or water supply well; or
 - c. 150 feet of an occupied residence, public building, or public use area.
12. Land application must be consistent with all the following conditions:
 - d. Wastewater application shall not exceed 0.2 inch/hour, 0.5 in/day, 1.0 in/week, and 24 in/year.
 - e. Land application sites shall have vegetation established as soon as practicable after waste incorporation within the normal crop planting and harvesting season.
 - f. Wastes shall be land applied at least 30 days before crop harvesting or grazing by cattle.
 - g. Wastes shall not be applied on field slopes exceeding 20 percent.
 - h. Land application shall not occur during frozen; snow covered, or saturated soil conditions.
 - i. Land application shall not occur during rainfall events.
 - j. Land applied stormwater shall be tested for the parameters below each time it is land applied. Application rates shall not exceed the following:

<u>Parameter</u>	<u>Maximum Annual Loading</u>
Total Kjeldahl Nitrogen (TKN)	150 lbs/acre/year
Oil & Grease	1000 lbs/acre/year
13. Annual Operating Report: Records shall be maintained and summarized into an annual operating report, which shall be submitted by January 28th of each year for the previous calendar year. The summarized annual report shall be in addition to reporting requirements in Table A. The annual report shall include the following for the previous calendar year:
 - k. Record of maintenance and repairs performed, documentation of required facility inspections, and description of any unusual operating conditions encountered;
 - l. Gallons of biodiesel produced, the amount of glycerin and other by-products generated and by-product disposal methods;
 - m. Quantity of glycerin, fatty acids, and other materials received, stored, or processed at the site;
 - n. If illegal discharges from holding tanks, secondary containment, etc. occurred, provide how many times the discharges occurred, the discharge flows, reasons for the discharge and related cleanup activities;
 - o. If land application is used as a best management practice, include the location of irrigated fields, volume irrigated, irrigation period, application rate, application area, and once per year soil sampling at each land application site. Soil pH at land application sites shall be between 6.0 – 9.0 SU. Soil sampling shall be in accordance with University of Missouri publication G09215 or G09217.

STANDARD CONDITIONS

In addition to specified conditions stated herein, this permit is subject to the attached Standard Conditions Part I and Part III dated August 1, 2014 and March 1, 2015, respectively, and hereby incorporated as though fully set forth herein.

SPECIAL CONDITIONS

1. The full implementation of this operating permit, which includes implementation of any applicable schedules of compliance, shall constitute compliance with all applicable federal and state statutes and regulations in accordance with §644.051.16, RSMo, and the CWA section 402(k); however, this permit may be reopened and modified, or alternatively revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - a. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - b. Controls any pollutant not limited in the permit.
2. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - a. Incorporate new or modified effluent limitations or other conditions if the results of a waste load allocation study, toxicity test, or other information indicates changes are necessary to assure compliance with Missouri Water Quality Standards.
 - b. Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's current 303(d) list.
3. The permit as modified or reissued shall also contain any other requirements of the Clean Water Act then applicable.
4. Changes in Discharges of Toxic Substances. In addition to the reporting requirements under §122.41(1), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:
 - a. That an activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
 - 1) One hundred micrograms per liter (100 µg/L);
 - 2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile;
 - 3) Five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol;
 - 4) One milligram per liter (1 mg/L) for antimony;
 - 5) Five (5) times the maximum concentration value reported for the pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
 - 6) The notification level established by the Department in accordance with 40 CFR 122.44(f).
 - b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - 1) Five hundred micrograms per liter (500 µg/l);
 - 2) One milligram per liter (1 mg/l) for antimony;
 - 3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with §122.21(g)(7).
 - 4) The level established by the Director in accordance with §122.44(f).
5. Reporting of Non-Detects:
 - a. An analysis conducted by the permittee or their contracted laboratory shall be conducted in such a way that the precision and accuracy of the analyzed result can be enumerated.
 - b. The permittee shall not report a sample result as "Non-Detect" without also reporting the detection limit of the test. Reporting as "Non-Detect" without also including the detection limit will be considered failure to report, which is a violation of this permit.
 - c. The permittee shall report the "Non-Detect" result using the less than sign and the minimum detection limit (e.g. <10).
 - d. Where the permit contains a Minimum Level (ML) and the permittee is granted authority in the permit to report zero in lieu of the < ML for a specified parameter (conventional, priority pollutants, metals, etc.), then zero (0) is to be reported for that parameter.
 - e. See Standard Conditions Part I, Section A, #4 regarding proper detection limits used for sample analysis.
 - f. When calculating monthly averages, one-half of the minimum detection limit (MDL) should be used instead of a zero. Where all data are below the MDL, the "<MDL" shall be reported as indicated in item (C).

PUBLIC NOTICE OF GENERAL PERMIT COVERED FACILITIES

1. As required by 10 CSR 20-6.020(1)(C)2., permits proposed to be issued to new biodiesel manufacturing facilities must undergo public notification for thirty (30) calendar days prior to issuance.
2. Public notice of renewal or reissuance is required only if the facility was found to be in unresolved significant noncompliance at the time of permit renewal [10 CSR 20-6.020(1)(C)4.].
3. All master general permit templates are required to undergo not less than thirty (30) days public notice before the permit becomes effective [10 CSR 20-6.020(1)(B)].

PERMIT RENEWAL

1. Unless terminated, the permittee shall submit an application for the renewal of this permit by submitting *Form E-Application for General Permit* <http://dnr.mo.gov/forms/780-0795-f.pdf> no later than thirty (30) days prior to the permit's expiration date if they wish to continue an activity regulated by this permit after permit expiration.
2. When a facility submits a timely and complete application in accordance with 10 CSR 20-6.010(5)(B), and (10)(E)1, as well as §644.051.10 RSMo 2015, and if the Department is unable through no fault of the permittee to issue a renewal prior to expiration of the previous permit, the terms and conditions of the expired permit are administratively continued and will remain fully effective and enforceable until such time when a permit action is taken. Failure to submit a renewal application for a facility that is still in operation is a violation of the Missouri Clean Water Law. Failure to apply for renewal of a permit may result in termination of this permit and enforcement action to compel compliance with this condition and the Missouri Clean Water Law.
3. As part of the complete application and as required by the federal NPDES eReporting rule, participation in the Department's Electronic Discharge Monitoring Report Submission System (eDMR) will be required. Facilities already participating in eDMR need not re-apply upon renewal. More information can be found at: <http://dnr.mo.gov/env/wpp/edmr.htm>.

PERMIT TRANSFER

1. This permit may not be transferred to a new owner in any fashion except by submitting an *Application for Transfer of Operating Permit* <http://dnr.mo.gov/forms/780-1517-f.pdf> signed by the seller and buyer of the facility along with the appropriate modification fee. In some cases, revocation and reissuance may be necessary. Standard Condition Part 1, Subsection D.7 applies.
2. Facilities with transfers carried out without prior notice to the Department will be considered to be operating without a permit and may be assessed an administrative penalty.

PERMIT TERMINATION

1. The permittee shall apply for permit termination when activities covered by this permit have ceased and no significant materials as defined by 10 CSR 20-6.200(1)(C)27. remain on the property or if on the property are stored in such a way as to have no potential for pollution. Whenever a release or a potential for release from a permitted facility is permanently eliminated, the existing permit may be terminated.
2. Proper closure of any storage structure is required prior to permit termination.
3. In order to terminate this permit, the permittee shall notify the Department's appropriate regional office by completing and submitting *Request for Termination of Operating Permit* <http://dnr.mo.gov/forms/780-1409-f.pdf>. The Department may require inspection of the premises prior to granting termination of a permit.

**MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-R23E000
MASTER GENERAL PERMIT**

The Federal Water Pollution Control Act [Clean Water Act (CWA)] Section 402 of Public Law 92-500 (as amended) established the National Pollution Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of stormwater from certain point sources. All such discharges are unlawful without a permit (Section 301 of the CWA). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (permits) are issued by the Missouri Department of Natural Resources (Department) under an approved program, operated in accordance with federal and state laws (Federal CWA and Missouri Clean Water Law Section 644 as amended). Permits are issued for a period of five (5) years unless otherwise specified.

Per 40 CFR 124.56, 40 CFR 124.8, and 10 CSR 20-6.020(1)(A)2., a Fact Sheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the permit. A Fact Sheet is not an enforceable part of a Missouri State Operating Permit.

This Fact Sheet is for a:

Master General Permit

PART I – FACILITY INFORMATION

Facility Type: Industrial

Facility Standard Industrial Classification (SIC) Code and Activity:

2841	Glycerin, Crude and Refined
2869	Industrial Organic Chemicals, Not Elsewhere Classified
2899	Chemicals and Chemical Preparations, Not Elsewhere Classified

Facility Description:

This permit authorizes stormwater runoff, secondary containment, sump, and oil and water separator discharges from biodiesel manufacturing facilities. This permit does not authorize any non-stormwater discharges other than the specific discharges allowed in the applicability section of this permit. If a facility requires the ability to discharge or otherwise dispose of process wastewater not allowed by this permit, they must apply for a site-specific permit. Glycerin disposal options can be used by the facility so long as they do not result in the exposure of materials or products to stormwater. The fate of all glycerin must be documented in the annual report.

Clarification:

Common petroleum diesel (petrodiesel) is a petroleum distillate rich in paraffinic hydrocarbons. Petrodiesel is produced from fractional distillation of crude oil at atmospheric pressure, resulting in a mixture of carbon chains that contain between eight (8) and twenty-one (21) carbon atoms per molecule.

Biodiesel, on the other hand, is produced using a Transesterification process, reacting vegetable oils or animal fats with a short-chained aliphatic alcohol such as methanol or ethanol. Glycerol is a by-product of this transesterification process. Methanol is typically removed after the biodiesel and glycerol have been separated. The methanol is cleaned and recycled back to the beginning of the process. Biodiesel is sometimes referred to as FAME (Fatty Acid Methyl Ester). Biodiesel is chemically different from petrodiesel because it contains oxygen atoms, which leads to different physical properties. Biodiesel is usually mixed with petrodiesel in a blend of 20% biodiesel and 80% petro-diesel (called B20); or as B5 which is 5% biodiesel and 95% petrodiesel.

Another type of diesel is Renewable (Green) diesel. Green diesel is a petrodiesel-like fuel derived from biological sources that are chemically not esters and thus distinct from biodiesel. There are three primary methods for creating renewable, or green, diesel: Hydrotreating, Thermal Conversion and Biomass-to-Liquid. Renewable diesel is chemically the same as petrodiesel and can be mixed with petrodiesel in any proportion.

Changes:

- Land Application:
 - After careful review of discharge monitoring reports for this permit, it has been determined that the land application option has not been used by the facilities covered by this permit in the last two permit cycles. Conversation with industry experts revealed that the biodiesel production process has become increasingly efficient by recycling process materials and refining and selling glycerin (glycerol) and free fatty acids resulting from the transesterification process as value added residuals. For these reasons, land application has been removed from the effluent table and added as a best management practice for stormwater only discharges under the SWPPP.
 - Facilities that are not able to meet the requirements in Table A or that wish to discharge or land apply wastes (as opposed to stormwater) should apply for an individual site-specific permit.
 - Stormwater may be land applied at agronomic rates, and in accordance with 10 CSR 20-6.015, as a documented Best Management Practice (BMP) as long as it is detailed in the Stormwater Pollution Prevention Plan (SWPPP) and pre-approved by the Department. Additional setbacks apply to land application and are detailed in the permit.
 - Crude glycerin may neither be land applied nor discharged under this permit. Glycerin (glycerol) has an extremely high Biochemical Oxygen Demand (BOD₅) and a small amount can swiftly deplete oxygen levels in a stream or reservoir.
- Setbacks
 - Replaced the setbacks for operations within 100 feet of a water course, 300 feet of a lake or water supply well, and 1000 feet of a losing stream or sinkhole with direct references to the Department's regulations for metropolitan no-discharge streams, water supply wells or other structures, conduits to groundwater, and losing streams.
 - The prohibition to discharge to Outstanding National Resource Waters has been replaced with conditions outlining no-discharge facility requirements. Setbacks for to the Outstanding State Resource waters have been replaced with requirements related to stormwater only discharges.
- Federal acts outside of the Clean Water Act have been listed in a separate condition and are the responsibility of the applicant to ensure compliance.
- Reference to impaired waters as part of the 303(d) list has been replaced with the 305(b) report, which is more inclusive of all impaired waters, including the 303(d) list and TMDL waters.
- Effluent Limitations.
 - Glycerin (glycerol) has an extremely high Biochemical Oxygen Demand (BOD₅) and a small amount can swiftly deplete oxygen levels in a stream or reservoir. An effluent limitation for BOD₅ has been added to this permit. The new requirement will indicate if glycerin or other contaminants are being released into the environment through stormwater discharges.
 - The effluent Limit for Chemical Oxygen Demand (COD) has been retained since for methanol the COD is higher than BOD₅.
- In order to come into compliance with the requirement for electronic reporting per 40 CFR Part 127 National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule, use of electronic Discharge Monitoring Report (eDMR) system will be required in most instances. In the future and once made available by the Department, electronic applications and/or other forms and reports may also be required.
- Added conditions specific to certain general criteria such as good housekeeping and other best management practices to ensure compliance with the state's water quality standards. Further explanation is provided in the sections below.
- Other changes include the general restructuring of the permit to match current departmental templates and the use of the most up-to-date language available for use by the Department to match current policies, statues and regulations.

PART II – RECEIVING STREAM INFORMATION

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:

As per Missouri’s Effluent Regulations [10 CSR 20-7.015], the waters of the state are divided into the below listed seven (7) categories of receiving waters. Each category lists effluent limitations for specific parameters, which are presented in each outfall’s Effluent Limitation Table and further discussed in the Derivation & Discussion of Limits section.

- | | |
|---|-------------------------------------|
| Missouri or Mississippi River [10 CSR 20-7.015(2)]: | <input checked="" type="checkbox"/> |
| Lake or Reservoir [10 CSR 20-7.015(3)]: | <input checked="" type="checkbox"/> |
| Losing [10 CSR 20-7.015(4)]: | <input type="checkbox"/> |
| Metropolitan No-Discharge [10 CSR 20-7.015(5)]: | <input checked="" type="checkbox"/> |
| Special Stream [10 CSR 20-7.015(6)]: | <input checked="" type="checkbox"/> |
| Subsurface Water [10 CSR 20-7.015(7)]: | <input type="checkbox"/> |
| All Other Waters [10 CSR 20-7.015(8)]: | <input checked="" type="checkbox"/> |

Missouri Water Quality Standards (10 CSR 20-7.031) defines the Clean Water Commission water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and/or first classified receiving stream’s beneficial water uses shall be maintained in accordance with 10 CSR 20-7.031(4). The effluent limits established by this permit are intended to be protective of all streams that fall within the categories of receiving water bodies indicated above. A general permit does not take into consideration site-specific conditions.

PART III – RATIONALE AND DERIVATION OF EFFLUENT LIMITATIONS & PERMIT CONDITIONS

305(B) REPORT, 303(d) LIST, & TOTAL MAXIMUM DAILY LOAD (TMDL):

Section 305(b) of the Federal CWA requires that each state identify waters that are not meeting Water Quality Standards and for which adequate water pollution controls have not been required. Water Quality Standards protect such beneficial uses of water as whole body contact, maintaining fish and other aquatic life, and providing drinking water for people, livestock, and wildlife. The 303(d) list helps state and federal agencies keep track of waters that are impaired but not addressed by normal water pollution control programs.

A TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed that shall include the TMDL calculation. For facilities with an existing general permit before a TMDL is written on their receiving stream, the Department will evaluate the permit and may require any facility authorized by this general permit to apply for and obtain a site-specific operating permit. For facilities requesting a new general permit that are located within the watershed of an impaired water as designated on the 305(b) Report will be evaluated on a case-by-case basis for inclusion under this permit.

- Conditional: The Department will review all discharges to impaired waters on a case-by-case basis.

APPLICABILITY

This general permit authorizes stormwater, secondary containment, sump, and oil and water separator discharges from the SICs #2841, #2869, and #2899. The pollutants of concern, monitoring and reporting requirements, conditions, and terms of this permit are believed to be applicable and protective for this industrial sector and SICs. Other industrial processes and SICs might have differing pollutants of concern, required BMPs, or applicable regulations, and are therefore not covered by this general permit.

Applicability statement #15 says, “This permit does not authorize the discharge of waters other than stormwater, water from sumps, secondary containment, and oil and water separators as well as the allowable discharges listed above. This permit may apply to facilities conducting the blending of biodiesel with petroleum products, but only when the total amount of petroleum stored on site for purpose of blending with biodiesel does not exceed 1,000 gallons.” This applicability requirement is continued from the previous permit per the permit writer’s best professional judgment, with the added clarification of “for the purpose of blending biodiesel with petroleum products.” This statement is in place due to the pollutants of concern monitored in this permit are for SIC codes related to biodiesel production and storage. This permit does not have monitoring for pollutants associated with petroleum fuel production or storage. Below 1,000 gallons of petroleum products is not considered to be of environmental concern. Above this level, the permittee is no longer covered by this general permit and should seek a site specific permit that includes both petroleum and biodiesel pollutants of concern.

ANTI-BACKSLIDING:

A provision in the Federal Regulations [CWA §303(d)(4); CWA §402(c); CFR §122.44(I)] that requires a reissued permit to be as stringent as the previous permit with some exceptions.

- Not Applicable: All requirements and limitations in this stormwater permit are at least as protective as those previously established.

ANTIDegradation:

Antidegradation policies ensure protection of water quality for a particular water body on a pollutant-by-pollutant basis to ensure Water Quality Standards are maintained to support beneficial uses such as fish and wildlife propagation and recreation on and in the water. This also includes special protection of waters designated as an Outstanding National Resource Water or Outstanding State Resource Water [10 CSR 20-7.031(3)(C)]. Antidegradation policies are adopted to minimize adverse effects on water.

The Department has determined that the best avenue forward for implementing the Antidegradation requirements into general permits is by requiring the appropriate development and maintenance of a SWPPP. The SWPPP must identify all Best Management Practices (BMPs) that are reasonable and effective, taking into account environmental impacts and costs. This analysis must document why no-discharge or no exposure options are not feasible at the facility. This selection and documentation of appropriate control measures will then serve as the analysis of alternatives and fulfill the requirements of the Antidegradation Rule and Implementation Procedure 10 CSR 20-7.031(3) and 10 CSR 20-7.015(9)(A)5.

Any facility seeking coverage under this permit, which undergoes expansion or discharges a new pollutant of concern, must update their SWPPP and select new BMPs that are reasonable and cost effective. New facilities seeking coverage under this permit are required to develop a SWPPP that includes this analysis and documentation of appropriate BMPs. Renewal of coverage for a facility requires a review of the SWPPP to assure that the selected BMPs continue to be appropriate.

- Applicable: The pollutants of concern in this permit are chemical oxygen demand, biochemical oxygen demand, pH, total suspended solids, and oil and grease. Compliance with the effluent limitations established in this permit, along with the evaluation and implementation of BMPs as documented in the SWPPP, meets the requirements of Missouri's Antidegradation Review [10 CSR 20-7.031(3), 10 CSR 20-7.031 Table A, and 10 CSR 20-7.015(9)(A)5].

BENCHMARKS:

When a permitted feature or outfall consists of only stormwater, a benchmark may be implemented at the discretion of the permit writer. Benchmarks require the facility to monitor, and if necessary, replace and update stormwater control measures. Benchmark concentrations are not effluent limitations. A benchmark exceedance, therefore, is not a permit violation; however, failure to take corrective action is a violation of the permit. Benchmark monitoring data is used to determine the overall effectiveness of control measures and to assist the permittee in knowing when additional corrective actions may be necessary to comply with the limitations of the permit.

Because of the fleeting nature of stormwater discharges, the Department, under the direction of EPA guidance, determined monthly averages are capricious measures of stormwater discharges. The Technical Support Document for Water Quality Based Toxics Control (EPA/505/2-90-001; 1991) Section 3.1 indicates most procedures within the document apply only to water quality based approaches, not end-of-pipe technology-based controls. Hence, stormwater only outfalls will generally only contain a maximum daily limit (MDL) or benchmark, determined by the site-specific conditions including the receiving water's current quality.

Numeric benchmark values are based on water quality standards or other stormwater permits including the Environmental Protection Agency's (EPA's) Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP). Because precipitation events are sudden and momentary, benchmarks based on state or federal standards or recommendations use the Criteria Maximum Concentration (CMC) value, or acute standard. The CMC is the estimate of the highest concentration of a material in surface water to which an aquatic community can be exposed briefly without resulting in an unacceptable effect. The CMC for aquatic life is intended to be protective of the vast majority of the aquatic communities in the United States.

- Not Applicable: This facility has stormwater runoff, secondary containment, sump, and oil and water separator permitted features with effluent limitations and does not contain benchmarks. The effluent limitations listed are consistently achieved in these discharges by a variety of other industries with SWPPPs and is deemed protective of instream water quality and aquatic life.

OPERATOR CERTIFICATION REQUIREMENTS:

As per 10 CSR 20-6.010(8) Terms and Conditions of a Permit, permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions and regulations. Operators or supervisors of operations at regulated wastewater treatment facilities shall be certified in accordance with [10 CSR 20-9.020(2)] and any other applicable state law or regulation.

Not Applicable: This facility is not required to have a certified operator.

PRETREATMENT PROGRAM:

The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a Publicly Owned Treatment Works [40 CFR Part 403.3(q)].

Several special conditions pertaining to the permittee's pretreatment program may be included in the permit, and are as follows:

- Implementation and enforcement of the program,
- Pretreatment report submittal,
- Submittal of list of industrial users,
- Technical evaluation of need to establish local limitations, and
- Submittal of the results of the evaluation

Pretreatment programs are required at any POTW (or combination of POTW operated by the same authority) and/or municipality with a total design flow greater than 5.0 MGD and receiving industrial wastes that interfere with or pass through the treatment works or are otherwise subject to the pretreatment standards. Pretreatment programs can also be required at POTWs/municipals with a design flow less than 5.0 MGD if needed to prevent interference with operations or pass through.

Not Applicable: The permittee, at this time, is not required to have a pretreatment program or does not have an approved pretreatment program.

PUBLIC NOTICE OF COVERAGE FOR AN INDIVIDUAL FACILITY:

Public Notice of reissuance of coverage is not required unless the facility has been found to be in unresolved significant noncompliance [10 CSR 20-6.020(1)(C)4.]. The need for an individual public notification process shall be determined and identified in the permit [10 CSR 20-6.020(1)(C)5.]. Newly permitted facilities require public notice before the permit is issued.

Applicable: Issuance of coverage to individual facilities covered under this permit for the first time shall be placed on Public Notice for thirty (30) days in accordance with 10 CSR 20-6.020(1)(B) & (C)2.

WATER QUALITY STANDARDS:

Per 10 CSR 20-7.031(4), General Criteria shall be applicable to all waters of the state at all times including mixing zones. Additionally, 40 CFR 122.44(d)(1) directs the Department to establish in each NPDES permit to include conditions to achieve water quality established under Section 303 of the Clean Water Act, including State narrative criteria for water quality.

REASONABLE POTENTIAL ANALYSIS (RPA):

Federal regulation 40 CFR Part 122.44(d)(1)(i) requires effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause or contribute to an in-stream excursion above narrative or numeric water quality standard. In accordance with 40 CFR Part 122.44(d)(iii) if the permit writer determines that any given pollutant has the reasonable potential to cause, or contribute to an in-stream excursion above the water quality standard, the permit must contain effluent limits for that pollutant.

Conservative assumption: A traditional statistical Reasonable Potential Analysis has not been conducted for this master general permit; however, staff did conduct a reasonable potential determination based on sources of pollutants related to water quality standards. Activities performed by facilities covered under this master general permit were evaluated as to whether discharges have reasonable potential to cause or contribute to excursions of general criteria listed in 10 CSR 20-7.031(4). A reasonable potential to violate water quality standards is assumed for the pollutants of concern due to the nature of the activities carried out under this permit, resulting in the effluent limits contained in the permit.

(a) **Water Quality Standards.**

To the extent required by law, discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria. Each general criterion below was assessed in relation to activities carried out by facilities covered under this permit and numeric limits assigned for criteria where there was a reasonable potential to cause or contribute to an excursion above narrative or numeric water quality standards.

(b) **General Criteria.**

The following general water quality criteria are applicable to all waters of the state at all times

including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:

- (1) **Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses.**

The Department has determined that there is reasonable potential for activities covered under this general permit to cause the formation of putrescent, unsightly or harmful bottom deposits in waters of the state. This has been addressed by assigning an effluent limit for Total Suspended Solids and by requiring a SWPPP to address stormwater runoff. The Department has determined that the limit and BMP implementation for this pollutant are sufficient to protect water quality standard general criteria.
- (2) **Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses.**

The Department has determined that there is reasonable potential for activities exposed to stormwater and covered under this general permit to cause oil, scum or floating debris in waters of the state. This has been addressed by assigning limits for Oil and Grease, narrative conditions prohibiting the discharge of waters with a visible sheen, and by requiring a SWPPP to address stormwater runoff. The Department has determined that the limits and BMP implementation for these pollutants are sufficient to protect water quality standard general criteria.
- (3) **Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses.**

The Department has determined that there is reasonable potential for activities covered under this general permit to cause unsightly color and/or turbidity in waters of the state. This has been addressed by assigning effluent limits for Total Suspended Solids, narrative conditions prohibiting the discharge of cloudy or discolored water, and by requiring a SWPPP to address stormwater runoff. The Department has determined that the effluent limitations and BMP implementation for this pollutant are sufficient to protect water quality standards general criteria.
- (4) **Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life.**

The Department has determined that there is a reasonable potential for activities covered under this permit to contribute to toxicity to human, animal or aquatic life. This has been addressed by assigning effluent limitations for BOD₅, COD, pH, and Oil and Grease, and by requiring a SWPPP to address stormwater runoff. The Department has determined that the effluent limitations and BMP implementation for these pollutants are sufficient to protect water quality standard general criteria.
- (5) **There shall be no significant human health hazard from incidental contact with the water.**

Based on the activities carried out by the facilities under this general permit, the Department has determined there is no reasonable potential for contaminants to cause a significant health hazard from incidental contact with the water.
- (6) **There shall be no acute toxicity to livestock or wildlife watering.**

The Department has determined that there is reasonable potential for activities covered under this general permit to cause acute toxicity to livestock or wildlife watering. This has been addressed by requiring a SWPPP to address stormwater runoff. The Department has determined that compliance with the development of a SWPPP and BMP implementation are sufficient to protect water quality standard general criteria.
- (7) **Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community.**

The Department has determined that there is a reasonable potential for activities covered under this permit to contribute to physical, chemical or hydrologic changes that would impair the natural biologic communities within waters of the state. This has been addressed by assigning effluent limitations for BOD₅, COD, pH, and Oil and Grease, and by requiring a SWPPP to address stormwater runoff. The Department has determined that compliance with the effluent limitations and BMP implementation for these pollutants are sufficient to protect water quality standard general criteria.

- (8) **Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.**

Based on the activities carried out by the facilities under this general permit, the Department has determined there is no reasonable potential for the deposition of used tires, car bodies, appliances, demolition debris, used vehicles or equipment or solid waste into waters of the state other than what is addressed by the implementation of a SWPPP for the facility.

SCHEDULE OF COMPLIANCE (SOC):

Per § 644.051, RSMo, a permit may be issued with a Schedule of Compliance (SOC) to provide time for a facility to come into compliance with new state or federal effluent regulations, water quality standards, or other requirements. Such a schedule is not allowed if the facility is already in compliance with the new requirement, or if prohibited by other statute or regulation. An SOC includes an enforceable sequence of interim requirements (actions, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of an operating permit. *See also* Section 502(17) of the Clean Water Act, and 40 CFR 122.2. For new effluent limitations, the permit may include interim monitoring for the specific parameter to demonstrate the facility is not already in compliance with the new requirement. Per 40 CFR 122.47(a)(1) and 10 CSR 20-7.031(11), compliance must occur as soon as possible. If the permit provides a schedule for meeting new water quality based effluent limits, an SOC must include an enforceable, final effluent limitation in the permit even if the SOC extends beyond the life of the permit.

Not Applicable: This permit does not contain a SOC.

SETBACKS:

Setbacks are common elements of general permits and are established to provide a margin of safety in order to protect the receiving water from accidents, spills, unusual events, etc.

Direct references to the Department's regulations for metropolitan no-discharge streams, water supply wells or other structures, conduits to groundwater, and losing streams have been included in lieu of setbacks from previous permit drafts.

Per 10 CSR 20-7.015(6)(B) and 7.031(3)(C) Outstanding National and State Resource Waters are protected against any degradation in water quality, so stricter conditions apply in these watersheds.

Should the permittee choose land application as a best management practice, additional setbacks apply.

This general permit does not authorize discharges within 100 feet up gradient or upstream of any well or water supply structure, such as an intake, within a water designated for drinking water supply as defined in 10 CSR 20-7.031. This is applied per best professional judgment, due to the possible pollutants of concern in the effluent, such as BOD and glycerin.

SPILL REPORTING:

Any emergency involving a hazardous substance must be reported to the Department's 24 hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. The Department may require the submittal of a written report detailing measures taken to clean up a spill. These reporting requirements apply when the spill results in chemicals or materials leaving the permitted property or reaching waters of the state. This requirement is in addition to the noncompliance reporting requirement found in Standard Conditions Part I. <http://dnr.mo.gov/env/esp/spillbill.htm>.

Underground and above ground storage devices for petroleum products, vegetable oils and animal fats are subject to control under SPCC and are expected to be managed under those provisions. Substances regulated by federal law under the Resource Conservation and Recovery Act (RCRA) or the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) that are transported, stored, or used for maintenance, cleaning or repair shall be managed according to the provisions of RCRA and CERCLA. These storage devices are not covered under this general permit because to do so would create a double jeopardy for the permitted facility. Permit requirements cover those fueling areas and storage devices that fall below the threshold of SPCC, RCRA and CERCLA regulations.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP):

In accordance with 40 CFR 122.44(k) Best Management Practices (BMPs) must be used to control or abate the discharge of pollutants when:

- (1) Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities;
- (2) Authorized under section 402(p) of the CWA for the control of stormwater discharges;
- (3) Numeric effluent limitations are infeasible; or
- (4) The practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.

In accordance with the *Developing Your Stormwater Pollution Prevention Plan, a Guide for Industrial Operators*, (EPA 833-B-09-002) published by the United States Environmental Protection Agency (EPA) in June 2015 (<https://www.epa.gov/npdes/industrial-stormwater-guidance>), BMPs are measures or practices used to reduce the amount of pollution entering waters of the state from a permitted facility. BMPs may take the form of a process, activity, or physical structure. Additionally in accordance with the Stormwater Management, a SWPPP is a series of steps and activities to (1) identify sources of pollution or contamination, and (2) select and carry out actions that prevent or control the pollution of storm water discharges.

EPA developed factsheets on the pollutants of concern for specific industries along with the BMPs to control and minimize stormwater (<https://www.epa.gov/npdes/stormwater-discharges-industrial-activities>). Along with EPA's factsheets, the International Stormwater BMP database (www.bmpdatabase.org/index.htm) may provide guidance on BMPs appropriate for specific industries.

A SWPPP must be prepared by the permittee if the SIC code is found in 40 CFR 122.26(b)(14) and/or 10 CSR 20-6.200(2). A SWPPP may be required of other facilities where stormwater has been identified as needing better management. The purpose of a SWPPP is to comply with all applicable stormwater regulations by creating an adaptive management plan to control and mitigate pollution of stormwater runoff. Developing a SWPPP provides opportunities to employ appropriate BMPs to minimize the risk of pollutants being discharged during storm events. The following paragraph outlines the general steps the permittee should take to determine which BMPs will work to achieve the limits in the permit. This section is not intended to be all encompassing or restrict the use of any physical BMP or operational and maintenance procedure that will assist in pollution control. Additional steps or revisions to the SWPPP may be required to meet the requirements of the permit.

Areas which should be included in the SWPPP are identified in 40 CFR 122.26(b)(14). Once the potential sources of stormwater pollution have been identified, a plan should be formulated to best control the amount of pollutant being released and discharged by each activity or source. This should include, but is not limited to, minimizing exposure to stormwater, good housekeeping measures, proper facility and equipment maintenance, spill prevention and response, vehicle traffic control, and proper materials handling. Once a plan has been developed, the facility will employ the control measures that have been determined to be adequate to achieve the effluent limitations discussed above. The facility will conduct monitoring and/or inspections of the BMPs to ensure they are working properly and re-evaluate any BMP not achieving compliance with permitting requirements. For example, if sample results from an outfall show values of TSS above the effluent limit, the BMP being employed is deficient in controlling stormwater pollution. Corrective action should be taken to repair, improve, or replace the failing BMP. This internal evaluation is required at set frequencies but should be continued more frequently if BMPs continue to fail. If failures do occur, continue this trial and error process until appropriate BMPs have been established.

If failures continue to occur and the permittee feels there are no practicable or cost-effective BMPs that will sufficiently reduce a pollutant concentration in the discharge to the limits established in the permit, the permittee can submit a request to re-evaluate the values. This request needs to include:

- (1) A detailed explanation of why the facility is unable to comply with the permit conditions and unable to establish BMPs to achieve the limits;
- (2) Financial data of the company and documentation of cost associated with BMPs for review; and
- (3) The SWPPP, which should contain adequate documentation of BMPs employed, failed BMPs, corrective actions, and all other required information.

This will allow the Department to conduct a cost analysis on control measures and actions taken by the facility to determine cost-effectiveness of BMPs. The request shall be submitted in the form of an operating permit modification; the application is found at <https://dnr.mo.gov/forms/780-0795-f.pdf>.

- Applicable: A SWPPP shall be developed and implemented as well as incorporate required practices identified by the Department, incorporate control practices specific to site conditions, and provide for maintenance and adherence to the plan.

VARIANCE:

Per the Missouri Clean Water Law Section 644.061.4, variances shall be granted for such period of time and under such terms and conditions as shall be specified by the commission in its order. The variance may be extended by affirmative action of the commission. In no event shall the variance be granted for a period of time greater than is reasonably necessary for complying with the Missouri Clean Water Law Section 644.006 to 644.141 or any standard, rule, or regulation promulgated pursuant to Missouri Clean Water Law Section 644.006 to 644.141.

Not Applicable: This permit is not drafted under premises of a petition for variance.

WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:

Per 10 CSR 20-2.010(78), the amount of pollutant each discharger is allowed by the Department to release into a given stream after the Department has determined total amount of pollutant that may be discharged into that stream without endangering its water quality.

Not Applicable: Wasteload Allocations include an allowance for mixing. No mixing is allowed under general permits, so Water Quality Standards are used in place of Wasteload Allocation.

WHOLE EFFLUENT TOXICITY (WET) TEST:

Per 10 CSR 20-7.031(1)(FF), a toxicity test conducted under specified laboratory conditions on specific indicator organism; and per 40 CFR 122.2, the aggregate toxic effect of an effluent measured directly by a toxicity test. A WET test is a quantifiable method of determining if a discharge from a facility may be causing toxicity to aquatic life by itself, in combination with, or through synergistic responses when mixed with receiving water.

Not Applicable: At this time, the facility is not required to conduct a WET test.

PART IV – EFFLUENT LIMITATION DETERMINATION

EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	QUARTERLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
Precipitation	inches	8	*		*	No	Same
Flow	gallons	8	*		*	No	Same
Biochemical Oxygen Demand ₅ (BOD ₅)	mg/L	3, 8	90		60	Yes	New
Chemical Oxygen Demand	mg/L	3, 8	120		90	No	Same
Total Suspended Solids	mg/L	8	100		50	No	Same
pH	SU	2, 3	6.5-9.0		6.5-9.0	No	Same
Oil & Grease	mg/L	2, 3	15		10	No	Same

* Monitoring requirement only

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 1. State or Federal Regulation/Law | 6. Antidegradation Policy |
| 2. Water Quality Standard | 7. Water Quality Model |
| 3. Water Quality Based Effluent Limits | 8. Best Professional Judgement |
| 4. Lagoon Policy | 9. TMDL or Permit in lieu of TMDL |
| 5. Ammonia Policy | 10. WET test Policy |

DERIVATION AND DISCUSSION OF LIMITS:

Precipitation

Monitoring requirement only. Precipitation is measured to document local conditions. This is crucial information in the event of a weather related bypass event.

Flow

Monitoring requirement only. Flow is measured when discharging from containment structures. This information is necessary to document stormwater releases.

Biochemical Oxygen Demand:

Biodiesel facilities handle by-products of the transesterification process such as glycerin (glycerol) which has a very high biochemical oxygen demand; therefore, there is a reasonable potential for the discharge of stormwater contaminated with glycerin, which could create adverse conditions in local streams and cause a violation of water quality criteria. The Department has determined that these values are protective of state general criteria and technologically achievable.

Chemical Oxygen Demand

Effluent limits carried over from previous permit to protect for the General Criteria in the Water Quality Standard. The Department has determined that these values are protective of state general criteria and technologically achievable.

Total Suspended Solids

The Department has retained the previous effluent limit of 100 mg/L for daily maximum and 50 mg/L for quarterly average in this permit for all SIC codes. This is a technology based limit and is deemed to be achievable using best available technology. The Department has determined that these values are protective of state general criteria at 10 CSR-20-7.031(4) and are technologically achievable.

pH

The state water quality standard for pH is 6.5-9.0 SU [10 CSR 20-7.031(5)(E)]. In the absence of Effluent Limitation Guidelines, the state water quality standard 6.5-9.0 SU will be carried over from the previous permit and implemented in this permit.

Oil & Grease

This permit has water quality based effluent limit of 15 mg/L daily maximum, with a quarterly average of 10 mg/L for the protection of aquatic life. Oil and grease is considered a conventional pollutant. Oil and grease is a comprehensive test which measures for gasoline, diesel, crude oil, creosote, kerosene, heating oils, heavy fuel oils, lubricating oils, waxes, and some asphalt and pitch. This test would also detect biodiesel constituents. Results do not allow for separation of specific pollutants within the test, they are reported, totaled, as "oil and grease". Per 10 CSR 20-7.031 Table A: Criteria for Designated Uses; 10 mg/L is the standard for protection of aquatic life. This standard will also be used to protect the general criteria found at 10 CSR 20: 7.031(4). 10 mg/L is the level at which sheen is expected to form on receiving waters. Oils and greases of different densities will possibly form sheen or unsightly bottom deposits at levels which vary from 10 mg/L. To protect the general criteria, it is the responsibility of the permittee to visually observe the discharge and receiving waters for sheen or bottom deposits. The daily maximum was calculated using the Technical Support Document for Water Quality-Based Toxics Control (EPA/505/2-90-001). Section 5.4.2 indicates the waste load allocation can be set to the chronic standard. When the chronic standard is multiplied by 1.5, the daily maximum can be calculated. Hence, $10 * 1.5 = 15$ mg/L for the daily maximum.

Land Application of Stormwater Requirements

Land application must be consistent with all the following conditions:

- a) Wastewater application shall not exceed 0.2 inch/hour, 0.5 in/day, 1.0 in/week, and 24 in/year.
- b) Land application sites shall have vegetation established as soon as practicable after waste incorporation within the normal crop planting and harvesting season.
- c) Wastes shall be land applied at least 30 days before crop harvesting or grazing by cattle.
- d) Wastes shall not be applied on field slopes exceeding 20 percent.
- e) Land application shall not occur during frozen; snow covered, or saturated soil conditions.
- f) Land application shall not occur during rainfall events.
- g) Land applied stormwater shall be tested for the parameters below each time it is land applied. Application rates shall not exceed the following:

<u>Parameter</u>	<u>Maximum Annual Loading</u>
Total Kjeldahl Nitrogen (TKN)	150 lbs/acre/year*
Oil & Grease	1000 lbs/acre/year**

*Maximum annual loading assigned per 10 CSR 20-8.020(15)(F), which provides design criteria for a standardized conservative land application system. Values above 150 lbs/acre/year require the plant-available nitrogen (PAN) be calculated on a site specific basis, which is outside the scope of this general permit. Permittees wishing to have the TKN maximum annual loading based on the PAN may submit an application for a site specific permit.

**Maximum annual loading rate assigned per best professional judgment. Excessive application of oil and grease has the potential to kill or prevent the growth of vegetation, as well as become a source of pollutants in runoff/stormwater. Oil & grease from the sites covered in this permit may also contain toxics of concern due to industrial activities at the site. This conservative limitation ensures beneficial uses are maintained for the soil and there is no environmental concern from any stormwater runoff at the land application site.

SAMPLING FREQUENCY:

Sampling frequency is established in accordance with Department policy. Because of the variability of precipitation occurring in Missouri, it is the permit writer’s best professional judgment that quarterly sampling (one sample for each season of the year) is the minimal amount of sampling necessary to obtain a representative set of data on a stormwater discharge. If no discharges occur during a sampling period, report as “no-discharge.”

PART V – ADMINISTRATIVE REQUIREMENTS

On the basis of preliminary staff review and the application of applicable standards and regulations, the Department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit. The proposed determinations are tentative pending public comment.

PUBLIC MEETING:

A public meeting is not required for general permits with fewer than 50 General Permit Covered Facilities (GPCFs). MOR23E0000 covers nine GPCFs.

PUBLIC NOTICE:

The Department shall give public notice that a draft permit has been prepared and its issuance is pending. Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in and water quality concerns related to a draft permit. No public notice is required when a request for a permit modification or termination is denied; however, the requester and permittee must be notified of the denial in writing.

The Department must issue public notice of a pending operating permit or of a new or reissued statewide general permit. The public comment period is the length of time not less than 30 days following the date of the public notice which interested persons may submit written comments about the proposed permit.

For persons wanting to submit comments regarding this proposed operating permit, please refer to the Public Notice page located at the front of this draft operating permit. The Public Notice page gives direction on how and where to submit appropriate comments.

The Public Notice period for this operating permit was from 08/03/2018 to 09/03/2018; no comments were received.

DATE OF FACT SHEET: JULY 20, 2018

COMPLETED BY:

**STACIA BAX, ENVIRONMENTAL SUPERVISOR
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
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